



(43) International Publication Date
6 May 2005 (06.05.2005)

PCT

(10) International Publication Number
WO 2005/040403 A1

(51) International Patent Classification⁷: C12Q 1/00,
1/18, 1/26, 1/54, G01N 33/543, 27/26

(21) International Application Number:
PCT/SG2004/000351

(22) International Filing Date: 25 October 2004 (25.10.2004)

(25) Filing Language: English

(26) Publication Language: English

(30) Priority Data:
60/515,229 29 October 2003 (29.10.2003) US

(71) Applicant (for all designated States except US): AGENCY
FOR SCIENCE, TECHNOLOGY AND RESEARCH
[SG/SG]; 20 Biopolis Way, #07-01 Centros, Singapore
138668 (SG).

(72) Inventors; and

(75) Inventors/Applicants (for US only): GAO, Zhiqiang
[SG/SG]; Block 685B Choa Chu Kang Crescent, #14-298,
Singapore 682685 (SG). XIE, Hong [CN/SG]; Block
508 West Coast Drive, #09-251, Singapore 120508 (SG).
ZHANG, Chunyan [CN/SG]; Block 74 Telok Blangah

Heights, #20-305, Singapore 100074 (SG). YU, Yuan
Hong [MY/SG]; Block 138 Bishan Street 12, #06-456,
Singapore 570138 (SG).

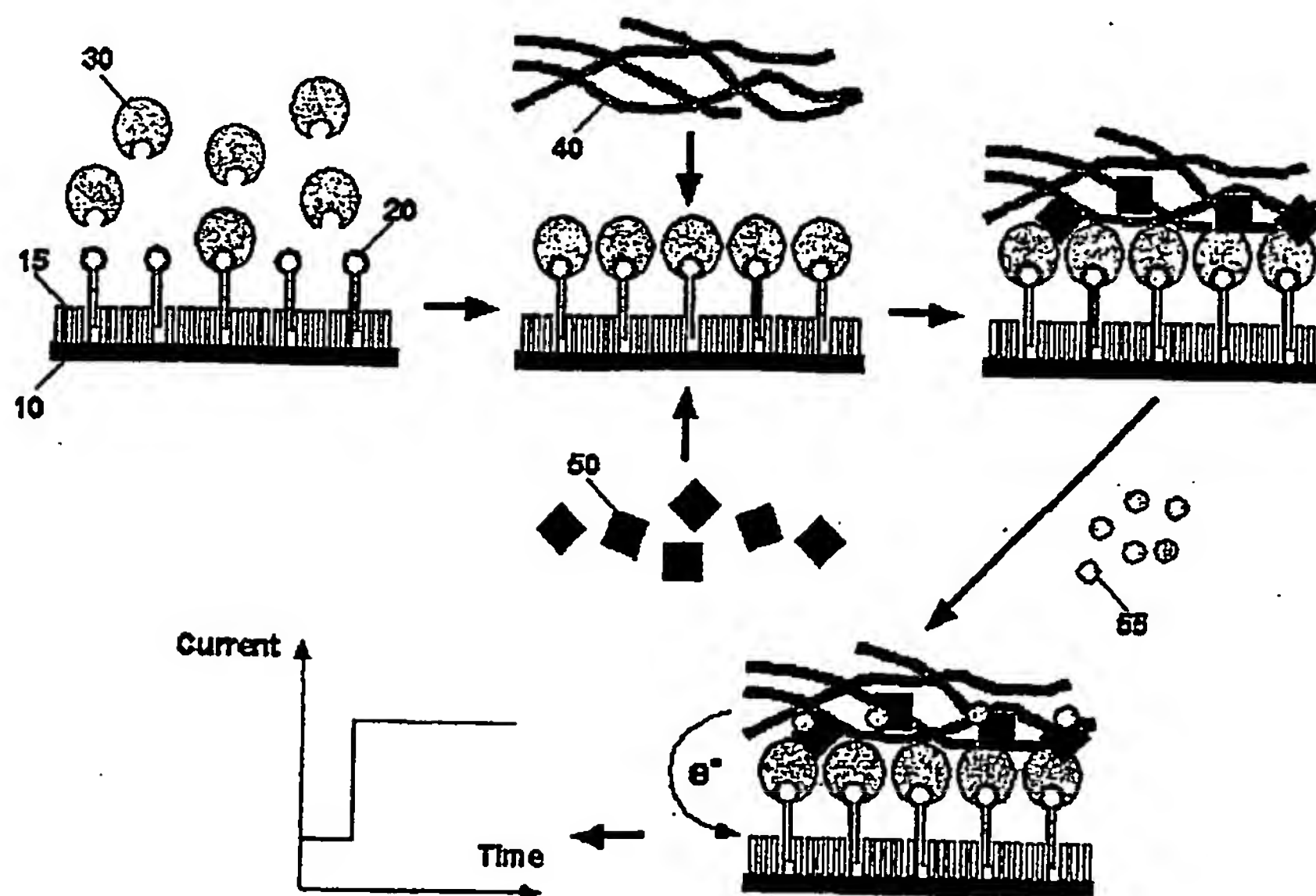
(74) Agent: VIERING, JENTSCHURA & PARTNER; P.O.
Box 1088, Rochor Road Post Office, Rochor Road, Singa-
pore 911833 (SG).

(81) Designated States (unless otherwise indicated, for every
kind of national protection available): AE, AG, AL, AM,
AT, AU, AZ, BA, BB, BG, BR, BW, BY, BZ, CA, CH, CN,
CO, CR, CU, CZ, DE, DK, DM, DZ, EC, EE, EG, ES, FI,
GB, GD, GE, GH, GM, HR, HU, ID, IL, IN, IS, JP, KE,
KG, KP, KR, KZ, LC, LK, LR, LS, LT, LU, LV, MA, MD,
MG, MK, MN, MW, MX, MZ, NA, NI, NO, NZ, OM, PG,
PH, PL, PT, RO, RU, SC, SD, SE, SG, SK, SL, SY, TJ, TM,
TN, TR, TT, TZ, UA, UG, US, UZ, VC, VN, YU, ZA, ZM,
ZW.

(84) Designated States (unless otherwise indicated, for every
kind of regional protection available): ARIPO (BW, GH,
GM, KE, LS, MW, MZ, NA, SD, SL, SZ, TZ, UG, ZM,
ZW), Eurasian (AM, AZ, BY, KG, KZ, MD, RU, TJ, TM),
European (AT, BE, BG, CH, CY, CZ, DE, DK, EE, ES, FI,

[Continued on next page]

(54) Title: METHOD FOR DETECTING ANALYTES BY MEANS OF AN ANALYTE/POLYMERIC ACTIVATOR BILAYER
ARRANGEMENT



(57) Abstract: The invention relates to the field of analytical sensors. In particular, the invention relates to a method for the detection of analytes in a sample by means of an electrode arrangement, which is characterized by the formation of a conductive bilayer of analytes and an agent for increasing the conductivity of said analytes on the surface of an electrode. The invention is also directed to an electrode arrangement useful for performing such method as well as to the use of such electrode arrangement as biosensor. Also disclosed is a novel class of redox polymers that are suitable for being used in the electrochemical detection of analytes. A method of making this class of polymers is also disclosed.



FR, GB, GR, HU, IE, IT, LU, MC, NL, PL, PT, RO, SE, SI, SK, TR), OAPI (BF, BJ, CF, CG, CI, CM, GA, GN, GQ, GW, ML, MR, NE, SN, TD, TG).

For two-letter codes and other abbreviations, refer to the "Guidance Notes on Codes and Abbreviations" appearing at the beginning of each regular issue of the PCT Gazette.

Published:

— *with international search report*